



PATENT ABSTRACTS OF JAPAN

(11) Publication number: 57156005 A

(43) Date of publication of application: 27.09.1982

(51) Int. Cl. B01D 13/00
// C08G 18/61, C08J 5/18

(21) Application number: 56041028

(22) Date of filing: 20.03.1981

(71) Applicant: NITTO ELECTRIC IND CO LTD

(72) Inventor: ABE MASAO
ICHINOSE TAKASHI

(54) SELECTIVE PERMEABLE MEMBRANE

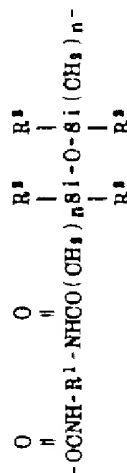
(57) Abstract:

PURPOSE: To obtain a selective permeable membrane of superior stain resistance, chemical resistance, heat resistance, etc. consisting of polyurethane having siloxane in the main chain.

CONSTITUTION: A dimethyl sulfoxide soln. of bis(hydroxyethyl)tetramethyl disiloxane is added to a methyl isobutyl ketone soln. of diphenylmethane diisocyanate and the mixed soln. is heated under stirring in gaseous nitrogen flow, and is allowed to react for 5hr at 100°C. The resultant viscous soln. is charged into a large column of water to allow polymer to deposit. After the filtered polymer is dried, it is dissolved together with LiCl in N-methyl-2-pyrrolidone whereby a filming soln. is prepd. This soln. is cast and coated on a glass sheet, and is immediately immersed in cold water, whereby a permeable membrane of 167μ is obtd. This membrane consists of the poly(urethane/disiloxane) having the repetitive units expressed by the general formulal, and the rate of permeation of pure water through this membrane un-

der 4kg/cm² pressure is 1.08m³/m².day. These properties of the membrane rarely change even after percolation in hot water and the membrane is highly resistant to heat.

COPYRIGHT: (C)1982,JPO&Japio



(但し、R¹は2価の有機基、R²はそれぞれ独立に1価のアルキル基又は芳香族基、nは1～4の整数を示す。)